



## Local Schema Repository: Installation of <xmlLegal> Schemas on a Local Machine

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### Introduction

This document provides instructions for creating an <xmlLegal> *Local Schema Repository* and for testing whether the *Local Schema Repository* has been properly set-up.

### 1. Download or Unzip Schemas

The first step is to download or unzip schemas from the <xmlLegal> Schema Repository or from a mirrored schema repository. It is possible to download schemas one at a time from a schema repository. This can be done manually or automatically with proper credentials. Alternatively, <xmlLegal> packages schemas in .zip files with the directory structure preserved.

Regardless of the manner in which you obtain <xmlLegal> schemas, *ensure that when saved locally the schemas are in their correct directories, as described below in [Section 2 Local Schema Repository Directory Structure](#).*

If you obtain an <xmlLegal> zip file, the directory structure will be preserved automatically if you preserve the directory structure when unzipping.

### 2. Local Schema Repository Directory Structure

The *Local Schema Repository* directory structure may have any root directory, but must otherwise correspond with the schema's namespace, starting with text **Schema/**. By convention, the default schema root directory for a *Local Schema Repository*, is:

**c:\xmlLegal\**

If you do not wish to use the default directory, then create a different directory and save files accordingly. If you obtain an <xmlLegal> zip file, unzip to a temporary directory and then copy the **Schema/** directory and its subdirectories to your root directory.

For a schema with the following namespace:

<http://www.xmllegal.org/Schema/Court/US/California/RR/01/>

The schema file should be saved as follows:

`c:\xmlLegal\Schema\Court\US\California\RR\01\RR.xsd`

If `d:\YourCompany\` were used as the root of your *Local Schema Repository* then the same schema would be saved at:

`d:\YourCompany\Schema\Court\US\California\RR\01\RR.xsd`

The latter example is acceptable and functional. Note, however, that `<xmlLegal>` distributes sample XML *instance documents* with a `schemaLocation` attribute that has a path with a root directory set to `c:\xmlLegal`. If you receive such a sample *instance document*, you must change the path to match your root directory. That is, change `c:\xmlLegal` to `d:\YourCompany`.

When live XML *instance documents* are passed between organizations, the *instance documents* should either *not include* `schemaLocation` or the `schemaLocation` attribute *should be ignored* because the recipient's *Local Schema Repository* may not be at the same path as at the sender's *Local Schema Repository*. *In this case, the path in an `<xmlLegal>` compliant schema repository can be determined programmatically from the namespace in the instance document.*

### 3. Do Not Change the Schema

Regardless of the root directory utilized for the *Local Schema Repository*, schema users do not need to - *and should not* - change any text in the *schema*. If changes are made to a *schema*, it is likely to result in *schema* or *instance document* validation problems.

If you wish to alter or extend an `<xmlLegal>` schema, this is allowed, provided you follow the rules and best practices of the `<xmlLegal>` the Schema Framework, as described in the `<xmlLegal>` General Public License (<http://www.xmllegal.org/Legal/GeneralPublicLicense.htm>).

### 4. Download and Install XML Spy

`<xmlLegal>` suggests using XML Spy to view, edit, and validate W3C XML Schemas. Using XML Spy or a similar tool will help you test whether you have installed `<xmlLegal>` schemas correctly. XML Spy can be downloaded from <http://www.altova.com/>. Alternatively, testing and validating schemas can be done using the code sample in [Section 7. Example Code for Validation](#). You can also use other applications with similar schema validation features.

### 5. Testing Schemas

Each schema should be saved in a folder that matches its namespace relative to `"Schema/` and without `"http://www.xmllegal.org/,"` as described in [Section 2](#). To test whether a schema has been downloaded properly or is otherwise valid, we suggest first opening the

**Attributes.xsd** schema in XML Spy before any other schema. Once **Attributes.xsd** is opened in XML Spy, check to see if it is well-formed (the yellow check-box in XML Spy) and then check to see whether it is valid (the green check-box in XML Spy).

If **Attributes.xsd** opens correctly, is well-formed, and is valid, then open other schemas, beginning with single-level primitives (e.g., **Address.xsd**, **Phone.xsd**, **Email.xsd**), double-level primitives (e.g., **Person.xsd**, **Organization.xsd**), etc. It is suggested that you open **Address.xsd** second, followed by **Phone.xsd**, **Email.xsd**, **Person.xsd**, and **Organization.xsd**. If these schemas open without error, then it is likely that you have saved the files correctly in your *Local Schema Repository*. Next, open any other schema to ensure that it opens properly and is valid.

If errors are encountered, it is likely that the directory structure where one or more schemas have been saved is incorrect. If you encounter unresolvable problems, email [help@xmllegal.org](mailto:help@xmllegal.org) or Winchel "Todd" Vincent at [Winchel@mindspring.com](mailto:Winchel@mindspring.com).

## 6. Validating Instance Document Over the Internet Is Discouraged

Although it is possible to validate using schemas from the <xmlLegal> website over the Internet (i.e., an .XML instance document would have a **schemaLocation** value of

<http://www.xmllegal.org/Schema/FaxAndFile/Court/RR/01/RR.xsd>

instead of, for example,

<C:\xmlLegal\Schema\FaxAndFile\Court\RR\01\RR.xsd>,

this is *not recommended*. It is recommended that validation be performed directly from the client's hard drive, not over HTTP, as HTTP can be too slow and unreliable. Furthermore, <xmlLegal> does not guarantee that its servers will be available for this type of validation, although the servers are available for download.

## 7. Example Code for Validation

Assuming <c:\xmlLegal> is your *Local Schema Repository* the following Visual Basic code validates an XML instance document based on the schema. When you load the schema into MSXML, the software will validate the schema (as you do manually in [Section 5](#), using XML Spy). As a result, you can use the following code both (a) to ensure you have set up your *Local Schema Repository* correctly and (b) to validate XML instance documents based on the schema:

```
Dim AllText As String
Dim xmlSchema As MSXML2.XMLSchemaCache40
Dim xmlDoc As MSXML2.DOMDocument40

Set xmlSchema = New MSXML2.XMLSchemaCache40
xmlSchema.Add "http://www.xmllegal.org/Schema/Court/RR/01/",
```

```
"C:\xmlLegal\Schema\Court\RR\01\RR.xsd"

Set xmlDoc = New MSXML2.DOMDocument40
Set xmlDoc.schemas = xmlSchema

xmlDoc.async = False
xmlDoc.Load
"C:\xmlLegal\Schema\Court\RR\Examples\RR_CMS_Login.xml"

If xmlDoc.parseError.errorCode <> 0 Then
    AllText = xmlDoc.parseError.errorCode & " " &
    xmlDoc.parseError.reason
    MsgBox AllText
Else
    MsgBox "No Error"
End If
```